



B-114850
4-15-70

30

REPORT TO THE CONGRESS

ACC 000108 Examination Of Financial Statements
Of The Tennessee Valley Authority
For Fiscal Year 1969, B-114850

BY THE COMPTROLLER GENERAL
OF THE UNITED STATES

715532 /

APRIL 15, 1970



1092353



COMPTROLLER GENERAL OF THE UNITED STATES
WASHINGTON, D.C. 20548

B-114850

To the President of the Senate and the
Speaker of the House of Representatives

This is our report on the results of the examination of financial statements of the Tennessee Valley Authority for fiscal year 1969, which was made pursuant to the Government Corporation Control Act (31 U.S.C. 841). We have included as an appendix to this report a description of TVA's retirement system together with financial statements and the certified public accounting firm's opinion thereon.

Copies of this report are being sent to the Director, Bureau of the Budget; the Secretary of the Treasury; and the Chairman of the Board of Directors of the Tennessee Valley Authority.

A handwritten signature in cursive script, reading "James B. Stacks", is positioned above the title.

Comptroller General
of the United States

C o n t e n t s

Page

DIGEST	1
--------	---

CHAPTER

1	INTRODUCTION	3
2	GENERAL COMMENTS	5
	Proprietary capital and payments to the Treasury of the United States	5
	Borrowing authority	8
	Construction program	9
	Power operations	12
	Procurement	14
	General procurement	14
	Fuels	15
	Foreign	16
	Reclamation of strip mined lands	18
	Navigation operations	19
	Recreation resource development	21
	Land Between the Lakes demonstra- tion project	21
	Information office services	22
3	SCOPE OF EXAMINATION	24
4	OPINION OF THE FINANCIAL STATEMENTS	25

EXHIBIT

I	Balance sheets, June 30, 1969 and 1968	29
II	Power program, net income and retained earnings for the years ended June 30, 1969 and 1968	30
III	Nonpower programs, net expense and ac- cumulated net expense for the years ended June 30, 1969 and 1968	31
IV	Source and disposition of funds for the years ended June 30, 1969 and 1968	33
	Notes to financial statements	34

Page

SCHEDULE

A	Completed plant, June 30, 1969	39
B	Construction and investigations in progress, June 30, 1969	40
C	Details of power expense for the year ended June 30, 1969	41
D	Details of nonpower net expense for the year ended June 30, 1969	42
E	Operating expenses of multiple-use facilities for the year ended June 30, 1969	46
F	Administrative and general expenses for the year ended June 30, 1969	47

APPENDIX

I	Retirement system of the Tennessee Valley Authority	50
---	-----------------------------------------------------	----

D I G E S T

WHY THE EXAMINATION WAS MADE

The Government Corporation Control Act requires the Comptroller General to make an annual audit of the Tennessee Valley Authority (TVA).

FINDINGS AND CONCLUSIONS

In the opinion of the General Accounting Office, the financial statements of TVA present fairly the financial position of TVA at June 30, 1969, and the results of its operations and the source and disposition of its funds for the year then ended, in conformity with generally accepted accounting principles applied on a basis consistent with that of the preceding year and with applicable Federal laws. (See p. 25.)

Net income from power operations for fiscal year 1969 was \$50.7 million--\$2.4 million less than the payment of \$53.1 million made as a return on the Government's appropriation investment in power. This payment is required by section 15d of the TVA Act. (See p. 12.)

Net income for fiscal year 1969 was \$1.9 million more than for fiscal year 1968. However,

- net income for fiscal year 1968 was reduced by an extraordinary charge to operations of \$10.3 million associated with the retirement of Hales Bar Dam and

- net income for fiscal year 1969 was increased by \$1.6 million because of a change in procedures for capitalizing interest during construction. (See p. 13.)

Although operating revenues for 1969 increased 5 percent over 1968, operating expenses for 1969 increased 8 percent over 1968. (See p. 12.)

Delays and increased costs were experienced during the year in TVA's construction program. The estimated total construction costs of the Browns Ferry and the Sequoyah nuclear power plants increased 19 and 20 percent, respectively. (See p. 10.)

Construction activity was suspended due to lack of funds at the Tellico Dam in February 1969, the Bear Creek multipurpose water control system

in July 1969, and the Land Between the Lakes recreation project from November 15, 1968, through April 20, 1969. (See p. 11.)

During fiscal year 1969, TVA increased and modified its wholesale power rates to offset rising costs and to help maintain the financial soundness of the power program. (See p. 13.)

In June 1969, \$100 million of 5-year power revenue bonds were sold at an effective interest rate of 7.944 percent. Another \$100 million in 25-year bonds bearing an effective interest rate of 8.323 percent were sold in October 1969. (See p. 8.)

RECOMMENDATIONS OR SUGGESTIONS

None.

AGENCY ACTIONS AND UNRESOLVED ISSUES

None.

MATTERS FOR CONSIDERATION BY THE CONGRESS

This report contains no recommendations or suggestions requiring action by the Congress. It is submitted to the Congress as required by the Government Corporation Control Act to disclose the results of the annual audit of TVA's financial statements and such other information deemed necessary to keep the Congress informed of the operations and financial conditions of TVA.

CHAPTER 1

INTRODUCTION

The General Accounting Office has made an examination of the financial statements of the Tennessee Valley Authority for the fiscal year ended June 30, 1969. The scope of our examination is described in chapter 3.

We have included as an appendix a description of TVA's retirement system together with financial statements and the certified public accounting firm's opinion thereon.

TVA is a wholly owned Government Corporation created by the TVA Act of 1933 (16 U.S.C. 831) for the purpose of providing for the unified development of the Tennessee River system, including flood control in the Tennessee River and Mississippi River Basins; navigation on the Tennessee River; generation of power consistent with flood control and navigation; reforestation and the proper use of marginal lands and agricultural and industrial development of the Tennessee Valley; operation of Government power and chemical properties at and near Muscle Shoals, Alabama; and the economic and social well-being of the people living in the Tennessee River drainage basin and adjoining territory.

During fiscal year 1969, TVA, in its power program, had 9.7 million kilowatts of generating capacity under construction or on order. Most of the new capacity will be in five nuclear and three coal-fired units of over a million kilowatts each. TVA officials have stated that each of these units will have more capacity than any unit in operation anywhere in the world.

TVA had about 19,500 employees at the end of fiscal year 1969--a decrease of about 200 from the previous year. The TVA Act empowers TVA to fix the compensation of employees without regard to civil service laws. Effective June 30, 1968, the TVA Board of Directors established a new management pay schedule of 11 grade levels for salaried employees, which includes four new management grades at lower levels. This schedule includes all classes of positions which involve primarily administrative and supervisory functions.

CHAPTER 2

GENERAL COMMENTS

In addition to providing for our examination of the financial statements, the Government Corporation Control Act (31 U.S.C. 851) provides for the Comptroller General to include in his annual report on the audit of each Government corporation such other information and comments as may be appropriate to keep the Congress informed of the financial condition and operations of each such corporation. Therefore we are including, in the following sections of this report, information and comments on matters which, we believe, may be of interest to the Congress.

PROPRIETARY CAPITAL AND PAYMENTS TO THE TREASURY OF THE UNITED STATES

From the inception of TVA in 1933 to June 30, 1969, the United States has made available to TVA \$2,515 million in proprietary capital through appropriations, bond purchases, and property transfers and TVA has repaid to the U.S. Treasury a total of \$401.7 million. For the same period, TVA retained earnings of \$644 million from its power program and incurred net expenses of \$418 million for its other programs. At June 30, 1969, the Government's proprietary capital in TVA was \$2,339 million. Of this amount, \$1,746 million represents the proprietary capital of the United States in TVA's power program.

A more detailed presentation of the above summary information is set forth in the following tabulation of the equity of the United States in TVA. In the tabulation, all activity is segregated between power and nonpower programs, as determined by the TVA. Unexpended appropriation balances, along with general assets not segregated by programs, are reported under nonpower programs.

	Balance at June 30, 1969		
	Power	Nonpower	Total
Appropriations, property transfers, and bonds issued:			
Appropriations by the Congress	\$1,376,236,427	\$1,023,107,004	\$2,399,343,431
Property transfers from other agencies, net	20,672,715	29,824,485	50,497,200
Bonds issued to the U.S. Treasury and Reconstruction Finance Corporation	<u>65,072,500</u>	<u>-</u>	<u>65,072,500</u>
Total	<u>1,461,981,642</u>	<u>1,052,931,489</u>	<u>2,514,913,131</u>
Less:			
Repayments to the general fund of the U.S. Treasury:			
Through June 30, 1947--under provisions of section 26 of the TVA Act	15,059,019	7,874,988	22,934,007
Through June 30, 1969--under provisions of section 26 of the TVA Act and title II of the Government Corporations Appropriations Act, 1948	170,000,000	33,659,048	203,659,048
Through June 30, 1969--under provisions of section 15d of the TVA Act	110,000,000	-	110,000,000
Bonds redeemed (\$56,500,000 under provisions of title II of the Government Corporations Appropriation Act, 1948)	<u>65,072,500</u>	<u>-</u>	<u>65,072,500</u>
Total	<u>360,131,519</u>	<u>41,534,036</u>	<u>401,665,555</u>
Net investment of U.S. Treasury funds	1,101,850,123	1,011,397,453	2,113,247,576
Retained earnings from power program	643,911,074	-	643,911,074
Net expense of nonpower programs	<u>-</u>	<u>-418,019,851</u>	<u>-418,019,851</u>
Total proprietary capital	<u>\$1,745,761,197</u>	<u>\$ 593,377,602</u>	<u>\$2,339,138,799</u>

^a Does not include short-term notes payable to the U.S. Treasury totaling \$100,000,000 at June 30, 1969.

The more significant figures in this table are discussed below.

At June 30, 1969, the accumulated total of appropriations by the Congress amounted to \$2,399 million.

Payments to the Treasury of \$185.1 million from power proceeds and \$41.5 million from nonpower proceeds were made under the Government Corporations Appropriations Act, 1948, and section 26 of the TVA Act. Also, TVA repaid from power proceeds \$65.1 million of bonds sold to the Treasury and Reconstruction Finance Corporation in fiscal years 1939-41.

Under section 15d of the act as added by Public Law 86-137 on August 6, 1959, TVA is required to make annual repayments into the Treasury of a return on the net appropriation investment in power facilities plus repayments of such investment. Beginning with fiscal year 1961,

the repayments are required in sums of not less than \$10 million for each of the first 5 years, \$15 million for each of the next 5 years, and \$20 million for each year thereafter until a total of \$1 billion shall have been repaid. Under certain circumstances, TVA's Board of Directors may defer the payments required under this section for not more than 2 years. Nine annual repayments, consisting of five \$10 million payments and four \$15 million payments, amounted to \$110 million at June 30, 1969.

The annual return on the net appropriation investment in power facilities is based on the computed average interest rate payable by the Treasury upon its total marketable public obligations as of the beginning of the fiscal year and the unrepaid appropriation investment as of the same date. The nine annual payments of the return on the appropriation investment amounting to \$390.6 million at June 30, 1969 (not shown in the above table), included a return of \$53.1 million paid in fiscal year 1969.

During fiscal year 1970, TVA will be required to pay into the Treasury from power proceeds \$15 million as a repayment of the appropriation investment in power facilities and \$57.6 million as a return on investment. Computation of the return is based on the unrepaid appropriation investment of \$1,102 million at the beginning of fiscal year 1970 and the average Treasury interest rate of 5.232 percent at the same date.

BORROWING AUTHORITY

Under section 15d of the TVA Act, TVA is authorized to issue and sell bonds, notes, and other evidences of indebtedness in an amount not to exceed \$1,750 million outstanding at any one time to assist in financing its power program. The authorizing legislation provides that the sale and issuance of such bonds not be subject to approval of the Secretary of the Treasury except as to the time of issuance and the maximum rates of interest to be borne by the bonds. The Secretary of the Treasury is authorized to purchase from TVA interim obligations up to \$150 million outstanding at any one time. Debt service on these obligations is payable solely from TVA's net power proceeds and has precedence over the payments to the Treasury described in the preceding section.

Bond sales in years prior to fiscal year 1969, the first in 1960 and the last in 1967, totaled \$275 million. Each of these bond issues was for a term of 25 years. The interest rates for these bonds ranged from 4.44 to 6.43 percent. In June 1969, \$100 million of power revenue bonds, maturing in 5 years, were sold at an effective interest rate of 7.944 percent. Another \$100 million of 25-year bonds bearing an effective interest rate of 8.323 percent were sold in October 1969.

Short-term power notes having maturities of about 4 months from date of issue were sold during the fiscal year by competitive bidding to various underwriters at an average interest rate of 6.71 percent. As of June 30, 1969, TVA had \$352.7 million in short-term notes outstanding, an increase of \$102.7 million over the amount outstanding at the beginning of the year.

TVA also had an arrangement with the Secretary of the Treasury for obtaining advances from the Treasury under provisions of section 15d of the TVA Act. The advances, which bear interest at the Treasury's short-term rate, were obtained at an average rate of 5.87 percent for the year. TVA had \$100 million in advances from the Treasury outstanding at June 30, 1969.

CONSTRUCTION PROGRAM

At June 30, 1969, TVA's gross investment in fixed assets for all programs--including construction and investigations in progress--was \$4,056 million. During fiscal year 1969, additions to construction in progress amounted to \$283.6 million and transfers to completed plant amounted to \$105.1 million. A summary of additions to construction in progress during the year follows.

Direct power:

Generating facilities:

Nuclear plants:

Browns Ferry--3 units	\$88,745,430	
Sequoyah--2 units	<u>4,722,029</u>	\$ 93,467,459

Coal-fired steam plants:

Bull Run (completed)	939,115	
Paradise--1 unit	37,345,519	
Cumberland--2 units	<u>38,503,534</u>	<u>76,788,168</u>

170,255,627

Transmission lines, substations, and other facilities

82,471,183

Total direct power

252,726,810

Multipurpose facilities:

Nickajack Dam and reservoir	2,353,911	
Tellico Dam and reservoir	4,108,664	
Tims Ford Dam and reservoir	8,112,781	
Upper French Broad water control system	255,108	
Bear Creek water control system	2,937,636	
Other	<u>502,175</u>	18,270,275

Chemical plant

2,652,555

Land Between the Lakes and other recreation and education facilities

4,901,105

Navigation facilities

140,099

Flood control facilities

385,095

General plant and equipment

4,516,268

Total additions to construction in progress in fiscal year 1969

\$283,592,207

The five nuclear and three coal-fired power-generating units under construction at the end of fiscal year 1969 are expected to add 9.7 million kilowatts to the existing 18.2 million kilowatts of generating capacity. Originally, one or more of these eight units were scheduled to go into operation in each of the 5 years beginning with 1970. The first of the nuclear units at Browns Ferry, Alabama, was scheduled to begin operation in 1970, the second in 1971, and the third in 1972. As a result of delays in equipment deliveries, operation at Browns Ferry is expected to be delayed about a year for the first unit and about 6 months for the second unit. The third unit is still scheduled to begin operation in 1972.

The estimate of total construction costs for the Browns Ferry facility was revised during fiscal year 1969 from \$392 million to \$466 million, an increase of 19 percent. A corresponding estimate for the Sequoyah nuclear power plant was revised from \$323 million to \$387 million, an increase of 20 percent. TVA attributes the increases to lack of experience in estimating labor costs for nuclear plant construction, to increased costs for labor and interest, to increased costs related to quality control and Atomic Energy Commission safety requirements, and to costs associated with the delay mentioned above--including storage costs for equipment and material awaiting installation.

Construction of the Paradise steam plant in western Kentucky was essentially completed, and this unit, the third at this location, was placed in initial operation in May 1969 and was scheduled for commercial operation in October 1969. TVA advised us that no major problems had been experienced in the construction of two coal-fired units for the Cumberland steam plant, begun in March 1968.

TVA is building a network of extra-high-voltage (500,000 volts) transmission lines and substations and has a number of transmission facilities of lower voltage under construction. Over 900 miles of 500,000-volt transmission lines are in service, and nearly 300 miles of such lines are under construction or approved for construction. About 350 miles of transmission lines of other voltages were under construction at the end of fiscal year 1969.

All major features of the Nickajack Dam were completed during the year. Construction activity on the Tellico Dam, which started in March 1967, was suspended in February 1969 due to lack of funds. Dam closure was rescheduled for January 1974. Work on the Tims Ford Dam continued, and the overall project was 60 percent completed during the year. The first of four earthfill dams constituting the Bear Creek multipurpose water control system was completed by the end of fiscal year 1969 and, starting in July 1969, construction was suspended because of lack of funds. The start of construction on the second dam was rescheduled for late spring 1970.

Construction work on the recreation project, Land Between the Lakes, was suspended during fiscal year 1969 from November 15 through April 20 because of lack of funds. However, some of the recreation and conservation education facilities are already in use. (See p. 21.)

POWER OPERATIONS

TVA supplies power, at wholesale, to 160 municipal and cooperative electric systems and one small privately owned system, which, in turn, distribute power to more than 2 million customers in parts of seven States. TVA also sells power directly to 43 industrial power consumers having large or unusual power requirements and to several Federal atomic, aerospace, and military installations.

Operating results of the power program for fiscal year 1969 are shown in exhibit II of the financial statements. The results are summarized and compared with those of fiscal year 1968, as follows:

	<u>1969</u>	<u>1968</u>	Percent increase or decrease(-)
Operating revenues:			
Sales of electric energy:			
Municipalities and cooperatives	\$222,234,637	\$197,252,414	13
Federal agencies	63,570,436	78,948,216	-19
Industries	92,238,627	84,187,691	10
Electric utilities	<u>7,303,950</u>	<u>8,558,102</u>	-15
Total	385,347,650	368,946,423	4
Interdivisional	<u>2,752,233</u>	<u>2,720,742</u>	1
Total sales of electric energy	388,099,883	371,667,165	4
Rents and other revenues	<u>15,181,053</u>	<u>12,064,630</u>	26
Total operating revenues	403,280,936	383,731,795	5
Operating expenses	<u>329,822,456</u>	<u>306,252,484</u>	8
Operating income	73,458,480	77,479,311	-5
Interest charges	<u>22,768,320</u>	<u>18,397,047</u>	24
Income before extraordinary item	50,690,160	59,082,264	-14
Extraordinary item	<u>-</u>	<u>10,283,169</u>	-100
Net income	<u>\$ 50,690,160</u>	<u>\$ 48,799,095</u>	4

The increase in operating expenses is attributed, by TVA, primarily to higher cost steam generation required to make up for reduced hydrogeneration. According to TVA, hydrogeneration in fiscal year 1969 was only 83 percent of

normal, because fiscal year 1969 was the second driest year in the last 27 years in the Tennessee Valley, and steam plants burned 3.2 million tons more coal than in 1968, the previous high year.

Also, the cost of coal per million British thermal units burned rose about 5 percent and interest on borrowings, cost of labor, and cost of materials increased substantially. As a result, income for fiscal year 1969 would have been significantly less than for fiscal year 1968 except for the extraordinary charge to operations of \$10.3 million through retirement of the Hales Bar Dam in fiscal year 1968 (this extraordinary charge is discussed in our report to the Congress on TVA's financial statements for fiscal year 1968, B-114850, March 25, 1969) and the change in procedures in fiscal year 1969 for capitalizing interest during construction which increased income \$1.6 million for that year. (See note 7 to the financial statements.) The net income of \$50.7 million for fiscal year 1969 was \$2.4 million less than the payment of \$53.1 million made in fiscal year 1969 as a return on the Government's appropriation investment in power as required by section 15d of the TVA Act.

Under the TVA Act, TVA is required to sell power at rates that are as low as feasible and yet adequate to maintain the financial soundness of the power program. Therefore TVA announced a rate increase, effective in March 1969, which is expected to provide about \$30 million in additional revenues during the first 12 months it is in effect. Also, automatic adjustment provisions for TVA's wholesale rate have been modified to reflect more quickly and fully future changes in fuel and money costs. These provisions, which became operative in August 1969, are expected to provide additional revenue of about \$30 million in the succeeding 12 months.

PROCUREMENT

General procurement

Our review of TVA's activities included a review of selected aspects of its procurement policies, procedures, and practices. During the year, TVA awarded about 26,000 contracts for materials, equipment, supplies, and nonpersonal services at costs totaling about \$871.9 million. This is the largest amount of purchases contracted for in any year since TVA's creation, which brings its total purchases to about \$6 billion.

TVA's net commitment for power system fuel (nuclear and coal) accounted for 76 percent of its total purchases in fiscal year 1969. An estimated 97 percent of the total purchases were either directly or indirectly for the power program. The other largest purchases were for equipment for nuclear and coal-fired steam plants under construction and for a synthetic ammonia unit and urea solution unit at costs totaling about \$7.6 million for the agricultural and chemical development program.

Section 9(b) of the TVA Act stresses the use of competitive bids except (1) under emergency conditions, (2) for repair parts, accessories, supplemental equipment, or services that are required for supplies or services previously furnished or contracted for, and (3) for small purchases made in the open market. This section also provides that TVA determine its own system of administrative accounts and forms and the contents of its contracts. Pertinent parts of this section are incorporated into TVA's written procurement policy.

TVA's procedures require the use of competitive bids to the maximum extent and the award of a contract to the lowest bidder when possible. If, after due advertisement, no bids are received that meet TVA's requirements and if, in TVA's opinion, further advertisement would not result in obtaining acceptable bids or sufficient time is not available for the preparation of new specifications and for readvertising, the purchase may be made by negotiation.

The negotiated fixed-price contracts and awards are based on analyses designed to determine the reasonableness of prices by comparison with current or recent prices for similar end results. In making awards, TVA is specifically exempt from the Federal Procurement Regulations to the extent that it considers their use to be inconsistent with the purpose of its program and the effective and efficient conduct of its business. TVA, however, incorporates into its procurement procedures such provisions of the Federal Procurement Regulations that it deems to be consistent with its needs and the requirements of the TVA Act.

Fuels

TVA has advised us that, whenever possible, TVA steam plants are located so that they may be served by two or more coal fields and by both rail and barge transportation. Three methods are used to procure coal--term, spot, and emergency purchases. The quantity and cost of coal provided for by procurement contracts awarded in fiscal year 1969 for power operations, by method, are shown below.

<u>Method</u>	<u>Tons</u>	<u>Cost</u>
	(millions)	
Term	158.0	\$629.6
Emergency	.9	4.1
Spot	<u>.8</u>	<u>3.3</u>
	<u>159.7</u>	<u>\$637.0</u>

TVA also made coal and coke awards of approximately \$1.5 million for other purposes, principally chemical operations.

Under TVA's policy, not less than 75 percent of the coal purchased for delivery during the year is purchased under term contracts calling for regular deliveries over periods of 6 months or more. Two contracts, which were awarded to the only two bidders after advertising, accounted for \$570 million of the awards under term contracts, one for about 140,000 tons a week for 15 years and the other for 28,000 tons a week for 16.5 years.

A price-escalation provision based on the Bureau of Labor Statistics Index of Wholesale Prices, All Commodities, was in effect under 45 term contracts at the year end. The value of the index increased 4.1 percent during the year and resulted in price increases totaling about \$400,000 for the year.

When the coal stockpile at any one steam plant is insufficient for 60 days' continuous operation, an emergency is deemed to exist and coal contracts for periods of 6 months or less may be entered into by negotiation in lieu of advertising for bids. With hydrogeneration at only 83 percent of normal, steam plants burned more coal during the year than in any previous year. Also, strikes against suppliers and carriers and adverse weather conditions caused coal supplies to fall below normal during much of the year. According to TVA, these and other adverse factors resulted in low inventories at some plants and made it necessary for the TVA to negotiate six emergency contracts in May and June for 905,400 tons of coal at a total cost of \$4 million. Spot purchases are made under short-term contracts normally calling for delivery within 4 weeks. The spot tonnage purchased during 1969 was 60 percent less than the spot tonnage purchased in 1968. These spot coal purchases were made at a cost of about \$427,000 less than the cost based on the average price paid for a comparable quantity under term contracts.

In August 1968, an invitation for nuclear fuel was issued to obtain offers and evaluate options for future needs. The four offers received by TVA were rejected. An option was exercised on an existing contract for replacement fuel for operation of the Sequoyah nuclear plant. The amended contract, now totaling about \$144 million, will supply first core loadings and replacement fuel for the plant until September 1977.

Foreign

The TVA's foreign purchases during the year amounted to \$13 million. The foreign purchases account for 1.5 percent of TVA's total purchases and 7 percent of its purchases of manufactured products for the year. TVA estimated that savings in costs through these foreign purchases totaled

\$4.4 million. Also, TVA advised us that when equipment orders exceed the productive capacity of domestic suppliers, as in the case of equipment ordered for the Browns Ferry nuclear plant, foreign purchases are made to reduce costly construction delays. TVA made no estimate of the additional savings resulting from the effect of foreign competition on domestic prices but indicated that it believed that such savings would be substantial.

RECLAMATION OF STRIP MINED LANDS

During calendar year 1968, approximately 53 percent of the coal received by TVA was obtained from surface (strip) mines where the overburden of earth and rock is removed to uncover the coal veins. According to TVA, strip mining is the safest method of recovering coal, usually makes more complete use of the coal resource available, and generally is cheaper than other mining methods. On the other hand, it scars the landscape and may open the way to erosion and stream pollution if conducted on an unregulated basis.

TVA has been concerned with development of measures that will reduce the harmful effects of strip mining and promote restoration of the land to some form of productive use for many years. Since the mid-1940's, TVA has worked with the States, landowners, and mine operators to develop and demonstrate practical and effective reclamation methods.

In 1965, TVA began including reclamation requirements in all of its term contracts for surface-mined coal to supplement its efforts to encourage strip-mining legislation and voluntary reclamation. All the five States in which TVA purchases coal has enacted some form of strip-mining legislation.

TVA's requirements are intended to protect land and water resources while permitting recovery of coal resources by stripping methods and to eventually return the land to productive use for forestry; wildlife; and, in some instances, recreation. We were informed that, prior to mining, the majority of the mined terrain was composed of submarginal farmland or mountainous timbered areas which were often heavily cut over. Where soil and growing conditions permit, TVA requires revegetation of the mined area with tree seedlings having future market potential (pulpwood, fence posts, etc.), which would thereby increase the value of the mined land. In addition, TVA's requirements result in access to back-country and remote areas through the preservation of haul roads developed during the mining process.

TVA contracts require that, to the maximum extent practicable, reclamation effort be performed at the same

time that the mining is conducted and be completed no later than 24 months after delivery of coal under the contracts unless TVA agrees to a longer period of time.

TVA's purchases of coal represent about 16 percent of the total coal produced from surface mines in Kentucky, Tennessee, Alabama, Illinois, and Virginia. TVA has worked with the States to encourage enactment of adequate strip-mining legislation, to help each State organize to enforce its legislation, and to conduct joint experiments in test and demonstration of reclamation methods. To the extent practicable, State and TVA inspections are coordinated and inspection reports are exchanged. Statements by State officials indicate that TVA has been a significant help to the States in the area of regulating strip-mining operations and obtaining related reclamation.

TVA's position on strip mining is that (1) it is the most economical and, in many cases, the only practical way of producing coal and other minerals, (2) the potential harmful effects--erosion, flooding, pollution--can be prevented at reasonable cost and this cost should be included in the price of the coal, (3) the responsibility for regulating strip mining must rest with the States, and failing that, with the Federal Government.

NAVIGATION OPERATIONS

The system of dams and reservoirs developed by TVA is used for navigation, flood control, and the generation of electric power. However, by law (16 U.S.C. 831h-1), stream flows are regulated primarily for navigation and flood control. The dams and reservoirs are operated and maintained by TVA. The operation and maintenance of locks, maintenance of channels, and compilation of river traffic statistics are functions of the Department of the Army. The U.S. Coast Guard is responsible for placing and maintaining channel markers and other aids to navigation on the main channels.

The Tennessee River waterway, a 9-foot commercially navigable channel extending 650 miles from the Ohio River to Knoxville, Tennessee, was substantially completed in 1945. The waterway is open to use without charge, as are

other federally improved inland waterways under the provisions of a river and harbor act, approved March 3, 1909 (33 U.S.C. 5). Over 50 companies operate barge-line service on the Tennessee River.

The growth of traffic on the Tennessee River since 1933, including traffic on the Barkley Canal, is illustrated by the following summary of shipments expressed in ton-miles for selected calendar years.

<u>Calendar year</u>	<u>Ton-miles</u>				
	<u>Coal and coke</u>	<u>Petroleum products</u>	<u>Grains and products</u>	<u>Other</u>	<u>Total</u>
	<u>(000 omitted)</u>				
1933	(a)	-	(a)	32,659	32,659
1940	(a)	33,515	17,926	45,985	97,426
1950	54,245	359,827	57,074	118,233	589,379
1960	712,168	359,758	923,572	317,237	2,312,735
1968	848,716	337,511	706,682	864,902	2,757,811

^aIncluded in "Other."

TVA estimates the private investment in waterfront plants and terminals since 1933 to be about \$1.8 billion.

TVA's net expense, including depreciation, of navigation operations was \$5.7 million for fiscal year 1969 compared with \$5.2 million for 1968, as shown in exhibit III of the financial statements.

RECREATION RESOURCE DEVELOPMENT

Except for the Land Between the Lakes demonstration project, recreation facilities and service on TVA lakes generally are operated by other Federal, State, and local agencies and by private business. TVA has transferred or conveyed land and land rights to other governmental agencies for administration, development, and operation as public recreation agencies. Other lands have been leased, licensed, and sold to other organizations for recreational use. Among the recreational uses of shorelands are public parks--Federal, State, county, and municipal; fishing camps and boat docks; public access; vacation resorts; summer residences; group camps; and wildlife management.

Land Between the Lakes demonstration project

In January 1964, the Public Works Appropriation Act provided \$4 million to begin development of the Land Between the Lakes project located on 170,000 acres of land between Kentucky Lake and Barkley Lake in western Kentucky and Tennessee. Development is being carried out through five principal subprograms: (1) development and cultivation of the recreation environment, such as the area's lakeshores, land, water, forests, and wildlife resources, (2) outdoor recreation, (3) conservation education, (4) access and administration, and (5) economic and environmental development of the surrounding region. TVA considers the project to be national in scope and intended to demonstrate social, economic, and other benefits in unified development and management of natural resources for large-scale outdoor recreation use, conservation education, and related purposes.

Methods and principles for acquisition, development, and operation of a recreation area are being tried and tested in development of criteria for the creation of future recreation facilities. Two large family campgrounds having 500 prepared camping sites, primitive and group camping facilities, camping trailer areas facilities, and boat launching and mooring facilities have been opened. A third family campground was the major site of construction in fiscal year 1969.

Opportunities are provided for conservation and nature study and for visitors to observe and participate in such

activities as reforestation, timber management, erosion control, and fish and wildlife management. Assembly buildings, walks, and nature trails are being provided. TVA is also conducting a wildlife and waterfowl management program in the area.

Land acquisition and construction costs amounting to \$42.3 million have been incurred on the Land Between the Lakes project as of June 30, 1969. At this date, the acquisition of all land required for the project was complete. Operating costs amounted to about \$1.3 million for fiscal year 1969, as shown by exhibit III. A total of 123 employees was assigned to the project at the end of fiscal year 1969, including temporary employees for the camping season.

In the developed camping and major day-use areas, fees are collected by TVA and paid to the Treasury as required by the provisions of 16 U.S.C. 460 1-5(a). These fees amounted to about \$61,000 during fiscal year 1969.

Privately owned resorts, hotels, and restaurants are not included within the area but are available on opposite shores of the bordering lakes. Although overall development is expected to take several years, specific facilities are being opened as they are completed.

TVA reported that, for calendar year 1968, estimated visits to the area totaled over 1 million, with some 211,000 camper-days recorded in the completed family campgrounds. TVA expects the project, within a few years, to draw 4 to 5 million visitor-days' recreation use annually.

INFORMATION OFFICE SERVICES

The TVA Information Office is an integral part of the Office of the General Manager. It advises the Board, the General Manager, and offices and divisions on informational matters and contacts with the public. It provides information, for public and official use, on TVA policies, decisions, and accomplishments; responds to inquiries and requests for information about TVA; prepares reports to the Congress, the President, and the public; edits reports, speeches, and articles for consistency with facts and established policy; and approves informational motion pictures prepared with TVA

participation for release to the public. It provides technical library services for the use of employees in the performance of their official duties. It designs, installs, and maintains graphic displays at visitor reception points and visitor reception areas, and reviews and advises on layout and illustrations for public reports and articles.

In fiscal year 1969, these services were performed by about 50 employees at a net cost of about \$816,000, including some visitor relations costs which are reimbursable from the Agency for International Development. About 30 of these employees maintain the technical libraries in Knoxville, Chattanooga, and Muscle Shoals; a working collection of forestry books and pamphlets at Norris; and a small legal collection in the Land Branch in Chattanooga. The Information Office distributes reports, maps, pamphlets, and other material without charge when such action is considered by TVA to be in accord with its public information responsibilities. TVA charges for material, which is considered to be beyond these responsibilities, in accordance with established rate schedules. Reimbursements received from such charges in fiscal year 1969 amounted to about \$15,000.

CHAPTER 3

SCOPE OF EXAMINATION

Our examination of TVA's balance sheet as of June 30, 1969, and the related statements of power and nonpower programs and of source and disposition of funds for the year then ended was made in accordance with generally accepted auditing standards and, accordingly, included such tests of the accounting records and such other auditing procedures as we considered necessary in the circumstances.

As provided by section 15d(c) of the TVA Act, TVA employs a firm of certified public accountants to audit its accounts and financial statements for each fiscal year to facilitate TVA's issuance and sale of revenue bonds. The audit by the firm of certified public accountants does not take the place of that required of our Office under the Government Corporation Control Act. However, in view of the fact that a firm of certified public accountants was employed by TVA, our audit included observations and tests of the firm's audit work.

CHAPTER 4

OPINION OF THE FINANCIAL STATEMENTS

The financial statements (exhibits I through IV and schedules A through F) were prepared by TVA. In our opinion, these financial statements present fairly TVA's financial position at June 30, 1969, and the results of its operations and the source and disposition of its funds for the year then ended, in conformity with generally accepted accounting principles applied on a basis consistent with that of the preceding year and with applicable Federal laws.

The public accounting firm's opinion on the financial statements follows.

LYBRAND, ROSS BROS. & MONTGOMERY

CERTIFIED PUBLIC ACCOUNTANTS

COOPERS & LYBRAND

IN PRINCIPAL AREAS
OF THE WORLD

To the Board of Directors of
Tennessee Valley Authority:

We have examined the accompanying financial statements of TENNESSEE VALLEY AUTHORITY at June 30, 1969 and 1968 and for the years then ended. Our examination was made in accordance with generally accepted auditing standards, and accordingly included such tests of the accounting records and such other auditing procedures as we considered necessary in the circumstances.

In our opinion, Exhibits I, II, III and IV of the aforementioned financial statements present fairly:

- (1) the financial position of the Authority at June 30, 1969 and 1968, and the results of operations and source and disposition of funds of its several programs for the years then ended; and
- (2) the assets and liabilities of the Authority at June 30, 1969 and 1968, relating to the power program, and the results of operations and source and disposition of funds of that program for the years then ended,

all in conformity with generally accepted accounting principles applied on a consistent basis.

The supplemental information appearing in Schedules A to F, inclusive, which has been subjected to audit procedures applied in the examination of the basic financial statements, is, in our opinion, fairly stated in relation to the basic financial statements taken as a whole.

Lybrand, Ross Bros. & Montgomery

New York, August 29, 1969.

FINANCIAL STATEMENTS

TENNESSEE VALLEY AUTHORITY
(A CORPORATION WHOLLY OWNED BY THE UNITED STATES OF AMERICA)
BALANCE SHEETS JUNE 30, 1969 AND 1968

A S S E T S

	<u>Power program</u>		<u>All programs</u>	
	<u>1969</u>	<u>1968</u>	<u>1969</u>	<u>1968</u>
	(Thousands)			
FIXED ASSETS, substantially all at original cost				
Completed plant; schedule A				
Multipurpose dams; note 1	\$ 477,324	\$ 475,627	\$ 955,403	\$ 950,405
Single-purpose dams	61,204	60,990	61,204	60,990
Steam production plants	1,516,730	1,499,136	1,516,730	1,499,136
Other electric plant	922,046	864,932	922,046	864,932
Other plant	-	-	155,079	146,609
	<u>2,977,304</u>	<u>2,900,685</u>	<u>3,610,462</u>	<u>3,522,072</u>
Less accumulated depreciation; note 2	855,979	789,293	970,978	900,964
	<u>2,121,325</u>	<u>2,111,392</u>	<u>2,639,484</u>	<u>2,621,108</u>
Construction and investigations in progress; schedule B and note 3	386,354	216,261	445,264	265,834
 Total fixed assets	 <u>2,507,679</u>	 <u>2,327,653</u>	 <u>3,084,748</u>	 <u>2,886,942</u>
 CURRENT ASSETS				
Cash	23,275	23,090	44,928	47,256
Accounts receivable	36,519	31,441	41,295	35,116
Inventories, principally at average cost	<u>57,444</u>	<u>51,488</u>	<u>63,771</u>	<u>59,303</u>
 Total current assets	 <u>117,238</u>	 <u>106,019</u>	 <u>149,994</u>	 <u>141,675</u>
 DEFERRED CHARGES				
Unamortized debt discount and expense	<u>7,063</u>	<u>5,119</u>	<u>7,063</u>	<u>5,119</u>
 Total assets	 <u>\$2,631,980</u>	 <u>\$2,438,791</u>	 <u>\$3,241,805</u>	 <u>\$3,033,736</u>

Notes 1 through 9 following the exhibits are

*Deduct

LIABILITIES

	Power program		All programs	
	1969	1968	1969	1968
	(Thousands)			
PROPRIETARY CAPITAL				
Appropriation investment; note 4				
Total congressional appropriations	\$1,376,237	\$1,375,375	\$2,399,344	\$2,349,094
Transfers of property from other Federal agencies	<u>20,672</u>	<u>20,560</u>	<u>50,497</u>	<u>50,267</u>
	1,396,909	1,395,935	2,449,841	2,399,361
Less repayments to General Fund of the U. S. Treasury; note 5	<u>295,059</u>	<u>280,059</u>	<u>336,593</u>	<u>321,591</u>
Appropriation investment	1,101,850	1,115,876	2,113,248	2,077,770
Retained earnings of power program; exhibit II	643,911	646,303	643,911	646,303
Accumulated net expense of nonpower programs; exhibit III	<u>-</u>	<u>-</u>	<u>418,020*</u>	<u>384,393*</u>
Total proprietary capital	<u>1,745,761</u>	<u>1,762,179</u>	<u>2,339,139</u>	<u>2,339,680</u>
LONG-TERM DEBT; note 6	<u>375,000</u>	<u>275,000</u>	<u>375,000</u>	<u>275,000</u>
SHORT-TERM NOTES; note 6	<u>452,655</u>	<u>350,000</u>	<u>452,655</u>	<u>350,000</u>
OTHER CURRENT LIABILITIES				
Accounts payable	43,980	37,721	52,262	45,723
Employees' accrued leave	7,510	7,150	15,015	14,419
Payrolls accrued	2,323	3,022	2,983	5,195
Interest accrued	<u>3,819</u>	<u>2,979</u>	<u>3,819</u>	<u>2,979</u>
Total other current liabilities	<u>57,632</u>	<u>50,872</u>	<u>74,079</u>	<u>68,316</u>
DEFERRED CREDITS				
Unamortized debt premium	<u>183</u>	<u>-</u>	<u>183</u>	<u>-</u>
CONTRIBUTIONS IN AID OF CONSTRUCTION	<u>749</u>	<u>740</u>	<u>749</u>	<u>740</u>
COMMITMENTS; note 3				
Total liabilities	\$2,631,980	\$2,438,791	\$3,241,805	\$3,033,736

an integral part of the financial statements.

EXHIBIT II

TENNESSEE VALLEY AUTHORITY
POWER PROGRAM
NET INCOME AND RETAINED EARNINGS
FOR THE YEARS ENDED JUNE 30, 1969 AND 1968

	1969		1968	
	Kwh	Amount	Kwh	Amount
	(Thousands)			
OPERATING REVENUES				
Sales of electric energy				
Municipalities and cooperatives	49,008,196	\$222,235	44,574,977	\$197,252
Federal agencies	14,826,909	63,570	18,801,782	78,948
Industries	20,568,110	92,239	19,213,413	84,188
Electric utilities	1,300,494	7,304	1,462,158	8,558
Total outside sales	85,703,709	385,348	84,052,330	368,946
Interdivisional	670,222	2,752	667,779	2,721
Total sales of electric energy	86,373,931	388,100	84,720,109	371,667
Rents		15,181		12,065
Total operating revenues		403,281		383,732
OPERATING EXPENSES; schedule C				
Production		210,304		191,073
Transmission		14,262		13,908
Customer accounts		304		269
Demonstration of power use		1,022		987
Administrative and general		15,551		14,452
Payments in lieu of taxes		14,510		13,097
Social security taxes		2,198		1,779
Provision for depreciation		71,672		70,688
Total operating expenses		329,823		306,253
Operating income		73,458		77,479
INTEREST CHARGES				
Interest on long-term debt		14,797		12,992
Other interest expense		23,924		13,443
Amortization of long-term debt discount, premium, and expense, net		83		81
Interest charged to construction; note 7		16,036*		8,119*
Total interest charges		22,768		18,397
Income before extraordinary item		50,690		59,082
EXTRAORDINARY ITEM; note 8		-		10,283
Net income		50,690		48,799
Retained earnings at beginning of period		646,303		644,366
		696,993		693,165
Payment of return on appropriation investment; note 5		53,082		46,862
Retained earnings at end of period		\$643,911		\$646,303

Notes 1 through 9 following the exhibits are an integral part of the financial statements.

*Deduct

TENNESSEE VALLEY AUTHORITY
NONPOWER PROGRAMS
NET EXPENSE AND ACCUMULATED NET EXPENSE
FOR THE YEARS ENDED JUNE 30, 1969 AND 1968

	<u>1969</u>	<u>1968</u>
	(Thousands)	
WATER RESOURCES DEVELOPMENT		
Navigation operations		
Studies and investigations	\$ 896	\$ 892
Operation and maintenance of facilities	2,102	1,808
Provision for depreciation	<u>2,723</u>	<u>2,515</u>
Total expense of navigation operations	<u>5,721</u>	<u>5,215</u>
Flood control operations		
Studies and investigations	700	758
Operation and maintenance of facilities	2,181	1,875
Local flood control improvements	331	309
Provision for depreciation	<u>1,240</u>	<u>1,262</u>
Total expense of flood control operations	<u>4,452</u>	<u>4,204</u>
Regional water quality management	1,277	1,218
Fish and wildlife development	287	289
Surveys and general studies for river development	868	555
Recreation projects	<u>506</u>	<u>428</u>
Total expense of water resources development	<u>13,111</u>	<u>11,909</u>
FERTILIZER AND MUNITIONS DEVELOPMENT		
Developmental production		
Cost of products distributed, including depreciation and depletion of \$1,674,000 in 1969, \$1,755,000 in 1968	20,643	21,073
General expenses		
Retirements of manufacturing plant and equipment	2,469	287
Other general expenses	917	814
Total general expenses	<u>3,386</u>	<u>1,101</u>
Total production expense	<u>24,029</u>	<u>22,174</u>
Less transfers and sales of products		
Transfers to TVA programs, at market prices		
Fertilizer industry demonstrations	12,990	14,872
Farm test demonstrations	410	528
Agricultural projects	508	604
Other	50	60
	<u>13,958</u>	<u>16,064</u>
Direct sales	2,288	1,866
Total transfers and sales	<u>16,246</u>	<u>17,930</u>
Net expense of developmental production	<u>7,783</u>	<u>4,244</u>
Fertilizer introduction		
Fertilizer industry demonstrations		
Fertilizers used	12,990	14,872
Educational distribution expense	1,123	1,006
	<u>14,113</u>	<u>15,878</u>
Less industry payments for fertilizer	<u>12,451</u>	<u>14,457</u>
	<u>1,662</u>	<u>1,421</u>

EXHIBIT III

Page 2

TENNESSEE VALLEY AUTHORITY
NONPOWER PROGRAMS
NET EXPENSE AND ACCUMULATED NET EXPENSE
FOR THE YEARS ENDED JUNE 30, 1969 AND 1968

	<u>1969</u>	<u>1968</u>
	(Thousands)	
FERTILIZER AND MUNITIONS DEVELOPMENT - continued		
Fertilizer introduction - continued		
Farm test demonstrations outside the Valley		
Fertilizers used	\$ 410	\$ 528
Planning and supervision	510	498
	<u>920</u>	<u>1,026</u>
Less farmer payments for fertilizer	303	348
	<u>617</u>	<u>678</u>
Net expense of fertilizer introduction	<u>2,279</u>	<u>2,099</u>
Research and development	<u>4,468</u>	<u>4,352</u>
Net expense of fertilizer and munitions development	<u>14,530</u>	<u>10,695</u>
GENERAL RESOURCES DEVELOPMENT		
Agricultural projects		
Fertilizers used	508	604
Planning and supervision	969	1,013
	<u>1,477</u>	<u>1,617</u>
Less farmer payments for fertilizer	293	346
	<u>1,184</u>	<u>1,271</u>
Development investigations and general expenses	304	415
	<u>1,488</u>	<u>1,686</u>
Forestry projects	987	1,076
Tributary area development	1,175	1,025
Regional development planning	299	181
Demonstrations in education and manpower development	40	-
Minerals projects	162	149
Environmental quality projects	167	220
Net expense of general resources development	<u>4,318</u>	<u>4,337</u>
LAND BETWEEN THE LAKES OPERATIONS	<u>1,272</u>	<u>1,044</u>
TOPOGRAPHIC MAPPING	<u>374</u>	<u>339</u>
OTHER EXPENSE, NET		
Abandoned project design costs	-	701
Other	22	22
Total other expense, net	<u>22</u>	<u>723</u>
Expense before extraordinary item	33,627	29,047
EXTRAORDINARY ITEM; note 8	<u>-</u>	<u>7,154</u>
Net expense; schedule D	33,627	36,201
Accumulated net expense at beginning of period	384,393	348,192
Accumulated net expense at end of period	<u>\$418,020</u>	<u>\$384,393</u>

Notes 1 through 9 following the exhibits are an integral part of the financial statements.

TENNESSEE VALLEY AUTHORITY
SOURCE AND DISPOSITION OF FUNDS
FOR THE YEARS ENDED JUNE 30, 1969 AND 1968

	Power program		All programs	
	1969	1968	1969	1968
	(Thousands)			
SOURCE				
Net power proceeds				
Power operations; exhibit II				
Operating revenues	\$403,281	\$383,732	\$403,281	\$383,732
Less operating expenses, excluding depreciation				
of \$71,672,000 in 1969, \$70,688,000 in 1968	<u>258,151</u>	<u>235,565</u>	<u>258,151</u>	<u>235,565</u>
	<u>145,130</u>	<u>148,167</u>	<u>145,130</u>	<u>148,167</u>
Sale of power facilities	<u>553</u>	<u>368</u>	<u>553</u>	<u>368</u>
Total net power proceeds	<u>145,683</u>	<u>148,535</u>	<u>145,683</u>	<u>148,535</u>
Gross proceeds from nonpower programs				
Sales of fertilizer; exhibit III				
Industry payments			12,451	14,457
Farmer payments			596	694
Direct sales			<u>2,288</u>	<u>1,866</u>
			<u>15,335</u>	<u>17,017</u>
Recoveries of operating expense			<u>501</u>	<u>939</u>
			<u>15,836</u>	<u>17,956</u>
Sale of nonpower facilities			<u>618</u>	<u>404</u>
Total nonpower proceeds	-	-	<u>16,454</u>	<u>18,360</u>
Sale of long-term bonds	100,227	59,592	100,227	59,592
Increase in short-term notes	102,655	47,800	102,655	47,800
Congressional appropriations	862	5,606	50,250	61,000
Property transfers	112	134	230	354
Contributions in aid of construction	<u>9</u>	-	<u>9</u>	-
Total source	<u>\$349,548</u>	<u>\$261,667</u>	<u>\$415,508</u>	<u>\$335,641</u>
DISPOSITION				
Expend for plant and equipment, excluding				
capitalized interest	\$239,042	\$191,599	\$268,530	\$234,493
Less salvage from plant transfers, and depreciation				
charged to construction and clearing accounts	<u>2,827</u>	<u>6,109</u>	<u>5,183</u>	<u>8,383</u>
	<u>236,215</u>	<u>185,490</u>	<u>263,347</u>	<u>226,110</u>
Payments to U. S. Treasury; note 5				
Return on appropriation investment	53,082	46,862	53,082	46,862
Repayment of appropriation investment	<u>15,000</u>	<u>15,000</u>	<u>15,002</u>	<u>15,003</u>
	<u>68,082</u>	<u>61,862</u>	<u>68,084</u>	<u>61,865</u>
Expense of nonpower programs, excluding noncash				
charges; note below	-	-	40,729	39,988
Interest	38,721	26,435	38,721	26,435
Deferred debt expense, net	<u>2,071</u>	<u>1,478</u>	<u>2,071</u>	<u>1,478</u>
Increase or decrease* in current assets less other				
current liabilities	<u>4,459</u>	<u>13,598*</u>	<u>2,556</u>	<u>20,235*</u>
Total disposition	<u>\$349,548</u>	<u>\$261,667</u>	<u>\$415,508</u>	<u>\$335,641</u>
Note: Provisions for depreciation				
Retirements of fertilizer manufacturing facilities			\$ 6,265	\$ 6,027
Abandoned project design costs			<u>2,469</u>	<u>287</u>
			-	<u>701</u>
			\$ 8,734	\$ 7,015

Notes 1 through 9 following the exhibits are an integral part of the financial statements.

TENNESSEE VALLEY AUTHORITY
NOTES TO FINANCIAL STATEMENTS

1. Allocation of cost of multipurpose projects--Section 14 of the TVA Act requires TVA's Board of Directors to allocate the cost of completed multipurpose projects, subject to the approval of the President of the United States. The cost of facilities installed exclusively for a single purpose is assigned directly to that purpose; the cost of multiple-use facilities is allocated among the various purposes served.

The total investment of \$955,403,000 in completed multipurpose dams at June 30, 1969, is classified as follows:

	Investment		
	Direct	Multiple-use	Total
	(Thousands)		
Power	\$301,881	\$175,443	\$477,324
Navigation	150,169	137,283	287,452
Flood control	59,659	126,083	185,742
Tributary area development	19	4,866	4,885
Total	<u>\$511,728</u>	<u>\$443,675</u>	<u>\$955,403</u>

2. Depreciation policy--Straight-line depreciation is provided for substantially on a composite basis. Rates of depreciation are derived from engineering studies of useful life and are reviewed each year.

3. Estimates of cost to complete major construction projects, and commitments--The cost to complete the major power projects (including nuclear fuel) under construction or authorized for construction at June 30, 1969, is estimated to be \$1,594,190,000, including commitments of \$905,601,000 for materials and services contracted for and not delivered. The corresponding estimate for multipurpose and nonpower projects is \$233,060,000, including commitments of \$5,067,000. Additional contractual commitments of \$8,856,000 for multipurpose and nonpower projects had been entered into at June 30, 1969, on which TVA's obligation is limited by the availability of funds from congressional appropriations for succeeding fiscal periods.

TVA and the City of Memphis, Tennessee, have entered into agreements under which (1) TVA sells to the City all the power and energy requirements of its electric distribution system, and (2) the City leases to TVA the Thomas H. Allen steam-electric generating plant with an installed capacity of 990,000 kilowatts; each agreement is for a term of 20 years, beginning January 1, 1965. The lease agreement provides for annual rental payments of \$6,900,000 and grants TVA an option to buy the plant for \$2,000,000 at the end of the lease term.

TENNESSEE VALLEY AUTHORITY

NOTES - CONTINUED

4. Appropriation investment--Changes in appropriation investment during the years ended June 30, 1969 and 1968, were as follows:

	Power program		All programs	
	1969	1968	1969	1968
	(Thousands)			
Congressional appropriations	\$ 862	\$ 5,606	\$ 50,250	\$ 61,000
Transfers of property from other Federal agencies	112	134	230	354
	974	5,740	50,480	61,354
Less repayments to General Fund of the U. S. Treasury	15,000	15,000	15,002	15,003
Increase or decrease* for the period	14,026*	9,260*	35,478	46,351
Balance, beginning of period	1,115,876	1,125,136	2,077,770	2,031,419
Balance, end of period	<u>\$1,101,850</u>	<u>\$1,115,876</u>	<u>\$2,113,248</u>	<u>\$2,077,770</u>

Action on a request for an additional appropriation of \$49,750,000 to become available as of July 1, 1969, is pending in the Congress.

5. Payments to the U. S. Treasury--Section 15d of the TVA Act requires the payment from power proceeds of a return on the net appropriation investment in power facilities plus repayments of such investment, beginning with fiscal year 1961. The amount of return payable during each fiscal year is based on the appropriation investment as of the beginning of that fiscal year and the computed average interest rate payable by the U. S. Treasury on its total marketable public obligations as of the same date. The repayment schedule calls for payment of not less than \$10 million for each of the first five fiscal years, \$15 million for each of the next five years, and \$20 million for each year thereafter until a total of \$1 billion shall have been repaid. The payments required by Section 15d may be deferred under certain circumstances for not more than two years.

Required payments have been made as follows:

	Return	Repayment	Total
	(Thousands)		
Total to June 30, 1968	\$337,515	\$ 95,000	\$432,515
Fiscal year 1969	53,082	15,000	68,082
	<u>\$390,597</u>	<u>\$110,000</u>	<u>\$500,597</u>

For fiscal year 1970 the required payments will be \$57,649,000 as a return and \$15,000,000 as a repayment, a total of \$72,649,000.

In addition to the payments from power proceeds, \$2,000 of nonpower proceeds was paid to the U. S. Treasury in fiscal year 1969 under the provisions of Section 26 of the TVA Act. This brought the total payments from nonpower proceeds to \$41,534,000.

Prior to 1961, under then existing legislation, TVA paid to the Treasury \$185,059,000 of power proceeds. In addition, \$65,072,000 of bonds sold to the Treasury and Reconstruction Finance Corporation in fiscal years 1939-1941 have been fully repaid from power proceeds. Section 26 of the TVA Act provides for annual payments to the Treasury of any power or nonpower proceeds not needed for the operation of dams and reservoirs, the conduct of the power program, and the manufacture and distribution of fertilizers.

TENNESSEE VALLEY AUTHORITY

NOTES - CONTINUED

6. Borrowing authority--Section 15d of the TVA Act authorizes TVA to issue bonds, notes, and other evidences of indebtedness up to a total of \$1,750 million outstanding at any one time to assist in financing its power program. Debt service on these obligations, which is payable solely from TVA's net power proceeds, has precedence over the payments to the U. S. Treasury described in note 5.

Evidences of indebtedness issued under Section 15d and outstanding on June 30, 1969, consist of the following:

	(Thousands)
Long-term debt	
4.40% Power Bonds 1960 Series A, due November 15, 1985	\$ 50,000
4-5/8% Power Bonds 1961 Series A, due July 1, 1986	50,000
4-1/2% Power Bonds 1962 Series A, due February 1, 1987	45,000
5.70% Power Bonds 1967 Series A, due May 15, 1992	70,000
6-3/8% Power Bonds 1967 Series B, due November 1, 1992	60,000
8% Power Bonds 1969 Series A, due June 1, 1974	<u>100,000</u>
Total long-term debt	<u>375,000</u>
Short-term notes	
Payable to U. S. Treasury	100,000
Payable to public	<u>352,655</u>
Total short-term notes	<u>452,655</u>
	<u>\$827,655</u>

7. Interest charged to construction--Effective July 1, 1968, TVA revised its procedure for capitalizing interest during construction. Under the revised procedure, interest is capitalized on all funds invested in power construction work in progress (with minor exceptions) at the average rate of interest paid on recent borrowings. Under the procedure used prior to July 1, 1968, the only interest capitalized was that paid or accrued on borrowed funds invested in the larger projects under construction. Adoption of the new procedure resulted in an increase of \$1,637,000 in power program net income for the year ended June 30, 1969.

8. Extraordinary item--The Hales Bar multipurpose dam was retired during fiscal year 1968 resulting in a loss allocated (see note 1) as follows:

	(Thousands)
Power program	\$10,283
Nonpower programs	
Navigation	\$4,471
Flood control	<u>2,683</u>
	<u>7,154</u>
	<u>\$17,437</u>

9. Retirement plan--TVA has a contributory retirement plan which covers substantially all of its salaried employees. The cost of currently accruing benefits is funded currently, and the unfunded prior service cost is being amortized and funded over a period of 37 years from July 1, 1968. The cost of the plan to TVA for the fiscal year ended June 30, 1969, was \$10,593,000.

SCHEDULES

TENNESSEE VALLEY AUTHORITY
COMPLETED PLANT
JUNE 30, 1969

	Assets	Depreciation	
		Provision year ended June 30, 1969	Accumulated balance June 30, 1969
Power			
Multipurpose dams; note a	\$ 477,324,371	\$ 6,524,650	\$137,941,672
Single-purpose dams	61,204,527	785,386	22,379,659
Steam production plants	1,516,729,757	42,039,539	457,540,133
Other electric plant	922,045,595	22,322,577	238,117,634
Total power	<u>2,977,304,250</u>	<u>71,672,152</u>	<u>855,979,098</u>
Navigation			
Multipurpose dams; note a	<u>287,452,065</u>	<u>2,723,078</u>	<u>41,425,759</u>
Flood control			
Multipurpose dams; note a	181,211,898	1,192,273	30,658,369
Multipurpose dams; note b	4,529,627	34,167	132,787
Bristol flood control plant	<u>2,073,301</u>	<u>13,708</u>	<u>51,917</u>
Total flood control	<u>187,814,826</u>	<u>1,240,148</u>	<u>30,843,073</u>
Tributary area development			
Multipurpose dams; note b	<u>4,885,248</u>	<u>26,382</u>	<u>102,288</u>
Recreation and conservation education			
Land between the lakes	39,872,571	246,325	675,517
Other	<u>386,679</u>	<u>207</u>	<u>219</u>
Total recreation and conservation education	<u>40,259,250</u>	<u>246,532</u>	<u>675,736</u>
Chemical	<u>67,870,192</u>	<u>2,000,486</u>	<u>25,569,040</u>
General	<u>44,876,341</u>	<u>2,571,963</u>	<u>16,383,158</u>
Total	<u>\$3,610,462,172</u>	<u>\$80,480,741</u>	<u>\$970,978,152</u>
Total completed plant			
Multipurpose dams	\$ 955,403,209	\$10,500,550	\$210,260,875
Single-purpose dams	61,204,527	785,386	22,379,659
Steam production plants	1,516,729,757	42,039,539	457,540,133
Other electric plant	922,045,595	22,322,577	238,117,634
Other plant	<u>155,079,084</u>	<u>4,832,689</u>	<u>42,679,851</u>
Total	<u>\$3,610,462,172</u>	<u>\$80,480,741</u>	<u>\$970,978,152</u>

GAO Notes:

- a. Common to power, navigation and flood control.
- b. Beech River water control system.

SCHEDULE B

TENNESSEE VALLEY AUTHORITY
CONSTRUCTION AND INVESTIGATIONS IN PROGRESS
 JUNE 30, 1969

	<u>Power program</u>	<u>All programs</u>
Construction in progress		
Generating facilities		
Browns Ferry Nuclear Plant	\$135,749,774	\$135,749,774
Sequoyah Nuclear Plant	4,921,686	4,921,686
Paradise Steam Plant unit 3	150,100,904	150,100,904
Cumberland Steam Plant	43,766,412	43,766,412
Total generating facilities	<u>334,538,776</u>	<u>334,538,776</u>
Transmission lines, substations, and other additions to power facilities	<u>43,966,869</u>	<u>43,966,869</u>
Navigation facilities	-	54,590
Flood control facilities	-	735,175
Multipurpose facilities		
Tellico Dam and Reservoir	-	15,588,762
Tims Ford Dam and Reservoir	6,003,512	28,345,841
Upper French Broad water control system	-	1,319,649
Bear Creek water control system	-	6,848,433
Other	163,452	407,171
Total multipurpose facilities	<u>6,166,964</u>	<u>52,509,856</u>
Chemical plant	-	2,395,448
Recreation and conservation education facilities		
Land between the lakes		2,488,308
Other		17,327
Total recreation and conservation education facilities	-	<u>2,505,635</u>
General plant		
General construction equipment and materials		2,676,447
Other additions to general plant		342,244
Total general plant	-	<u>3,018,691</u>
Total construction in progress	<u>384,672,609</u>	<u>439,725,040</u>
Investigations for future projects		
Power facilities	1,681,152	1,681,152
Navigation facilities	-	111,051
Flood control facilities	-	997,165
Multipurpose facilities	-	2,749,212
Total investigations for future projects	<u>1,681,152</u>	<u>5,538,580</u>
Total construction and investigations in progress	<u>\$386,353,761</u>	<u>\$445,263,620</u>

TENNESSEE VALLEY AUTHORITY
DETAILS OF POWER EXPENSE
FOR THE YEAR ENDED JUNE 30, 1969

SUMMARY	Total	Provision for depreciation	Total before depreciation (exhibit II)	Operation	Maintenance	Other
Production						
Multipurpose dams						
Direct	\$ 10,709,542	\$ 5,305,887	\$ 5,403,655	\$ 2,828,321	\$ 2,575,334	\$ -
Multiple-use; schedule E	3,893,357	1,218,763	2,674,594	2,272,511	402,083	-
Single-purpose dams	1,883,096	785,386	1,097,710	705,757	391,953	-
Cumberland Basin projects; note a	3,928,371	-	3,928,371	-	-	3,928,371
Steam plants	234,400,517	42,039,539	192,360,978	168,254,545	24,106,433	-
Total generation	254,814,883	49,349,575	205,465,308	174,061,134	27,475,803	3,928,371
Purchased power	8,499	-	8,499	-	-	8,499
Interchange power received	10,551,218	-	10,551,218	-	-	10,551,218
Interchange power delivered	11,180,430*	-	11,180,430*	-	-	11,180,430
System control and load dispatching	1,077,374	-	1,077,374	-	-	1,077,374
Other	4,381,922	-	4,381,922	-	-	4,381,922
Total production	259,653,466	49,349,575	210,303,891	174,061,134	27,475,803	8,766,954
Transmission	34,954,517	20,692,493	14,262,024	8,529,845	5,732,179	-
Customer accounts	304,113	-	304,113	304,113	-	-
Demonstration of power use	1,022,108	-	1,022,108	1,022,108	-	-
Payments in lieu of taxes; note b	14,509,633	-	14,509,633	-	-	14,509,633
Social security taxes	2,198,017	-	2,198,017	-	-	2,198,017
Administrative and general						
Direct	17,067,984	1,630,084	15,437,900	15,434,082	3,818	-
Multiple-use	112,618	-	112,618	112,618	-	-
Total operating expense	<u>\$329,822,456</u>	<u>\$71,672,152</u>	<u>\$258,150,304</u>	<u>\$199,463,900</u>	<u>\$33,211,800</u>	<u>\$25,474,604</u>

SYSTEM STATISTICS	Kwh generated less station use (thousands)	Production expense Total	Per kwh (mills)	Installed capacity at June 30, 1969 (kilowatts)	Ratio of average gross generation to installed capacity (percent)
Generation					
Multipurpose dams					
Direct	10,516,824	\$ 10,709,542	1.018	2,864,230	43.21
Multiple-use; schedule E	-	3,893,357	.370	-	-
Total multipurpose dams	10,516,824	14,602,899	1.388	2,864,230	43.21
Single-purpose dams	1,078,571	1,883,096	1.746	250,200	50.16
Cumberland Basin projects; note a	1,579,227	3,928,371	2.488	725,000	26.50
Alcoa dams; note c	1,813,336	-	-	423,715	48.98
Total hydro generation	14,987,958	-	-	4,263,145	41.35
Steam plants	75,600,891	234,400,517	3.100	13,976,135	65.19
Total generation; note d	90,588,849	-	-	18,239,280	59.62
Purchased power	4,265	8,499	-	-	-
Interchange power received	7,354,750	10,551,218	-	-	-
System control and load dispatching	-	1,077,374	-	-	-
Other	-	4,381,922	-	-	-
Total system input	97,947,864	-	-	-	-
Delivered under Alcoa agreement	1,756,213*	-	-	-	-
Interchange power delivered	6,808,481*	11,180,430*	-	-	-
Net energy supply	89,383,170	259,653,466	2.905	-	-
Shop and internal uses	6,158*	-	-	-	-
Transmission and transformation losses	3,003,081*	-	-	-	-
Total kwh sales and production expense	<u>86,373,931</u>	<u>\$259,653,466</u>	<u>3.006</u>		

Notes:

- TVA purchases substantially all of the output of six hydro plants in the Cumberland River Basin. In accordance with memorandums of understanding with the Corps of Engineers, Department of the Army, the Cumberland Basin projects are operated for optimum production of power in conjunction with TVA's power system, subject to flood control, navigation, and other operating requirements of the Army.
- Payments made to states and counties in which power operations are carried out. The basic amount is 5 percent of gross revenues from the sale of power to other than Federal agencies during the preceding year, with the provision of minimum payments under certain circumstances.
- Operation of twelve hydro plants of the Aluminum Company of America is coordinated with the operation of TVA's power plants under an arrangement whereby the storage and release of water from the Alcoa plants are carried out by the company under TVA's direction.
- Installed capacity increased 37,190 kilowatts during fiscal year 1969 from modifications to turbines and generators.

*Deduct

SCHEDULE D

Page 1

TENNESSEE VALLEY AUTHORITY
DETAILS OF NONPOWER NET EXPENSE
FOR THE YEAR ENDED JUNE 30, 1969

	Direct	Multiple-use (schedule E)	Total
WATER RESOURCES DEVELOPMENT			
Navigation operations			
Studies and investigations			
Navigation engineering and investigations	\$ 824,746	\$ -	\$ 824,746
Administrative and general expenses; schedule F	70,985	-	70,985
	<u>895,731</u>	<u>-</u>	<u>895,731</u>
Operation and maintenance of facilities			
Operation	16,623	1,704,383	1,721,006
Maintenance	25,210	271,911	297,121
Administrative and general expenses	-	84,464	84,464
	<u>41,833</u>	<u>2,060,758</u>	<u>2,102,591</u>
Provision for depreciation	<u>1,798,735</u>	<u>924,343</u>	<u>2,723,078</u>
Total expense of navigation operations	<u>\$2,736,299</u>	<u>\$2,985,101</u>	<u>5,721,400</u>
Flood control operations			
Studies and investigations			
System studies and investigations	\$ 284,332	\$ -	284,332
Local flood studies and cooperation with other agencies	383,832	-	383,832
Administrative and general expenses; schedule F	31,165	-	31,165
	<u>699,329</u>	<u>-</u>	<u>699,329</u>
Operation and maintenance of facilities			
Operation	14,358	1,781,674	1,796,032
Maintenance	-	297,359	297,359
Administrative and general expenses	-	87,983	87,983
	<u>14,358</u>	<u>2,167,016</u>	<u>2,181,374</u>
Local flood control improvements	<u>330,959</u>	<u>-</u>	<u>330,959</u>
Provision for depreciation	<u>361,747</u>	<u>878,401</u>	<u>1,240,148</u>
Total expense of flood control operations	<u>\$1,406,393</u>	<u>\$3,045,417</u>	<u>4,451,810</u>
Regional water quality management			
Regional water quality management			1,225,247
Provision for depreciation			8,280
Administrative and general expenses; schedule F			43,284
Total expense of regional water quality management			<u>1,276,811</u>
Fish and wildlife development			
Fish and wildlife development			269,778
Provision for depreciation			4,386
Administrative and general expenses; schedule F			12,985
Total expense of fish and wildlife development			<u>287,149</u>
Surveys and general studies for river development			
Surveys and general studies for river development			837,065
Administrative and general expenses; schedule F			30,911
Total expense of surveys and general studies for river development			<u>867,976</u>
Recreation projects			
Recreation resources development, including depreciation of \$207			472,074
Administrative and general expenses; schedule F			33,761
Total expense of recreation projects			<u>505,835</u>
Total expense of water resources development			<u>\$13,110,981</u>

TENNESSEE VALLEY AUTHORITY
DETAILS OF NONPOWER NET EXPENSE
FOR THE YEAR ENDED JUNE 30, 1969

FERTILIZER AND MUNITIONS DEVELOPMENT

Developmental production:		
Cost of products distributed; note a		
Materials used		\$ 3,853,637
Direct manufacturing and shipping expense		11,592,880
Indirect manufacturing and shipping expense		2,314,542
Provisions for depreciation and depletion		1,674,419
Recoveries from byproducts and in-process materials		172,627*
In-process inventory changes		21,285
Finished inventory changes		<u>1,358,848</u>
Total cost of products distributed		<u>20,642,984</u>
General expenses		
Retirements of manufacturing plant and equipment		2,469,155
Other general expenses		
Administrative and general; schedule F	\$ 442,410	
Shipping order expense	181,627	
Provision for depreciation of idle manufacturing plant and equipment	221,698	
Other	<u>71,313</u>	
Total general expenses		<u>917,048</u>
Total production expense		<u>3,386,203</u>
Less transfers and sales of products		<u>24,029,187</u>
Transfers to TVA programs, at market prices		
Fertilizer industry demonstrations		12,990,670
Farm test demonstrations		409,985
Agricultural projects		508,608
Other		<u>49,698</u>
Total transfers		<u>13,958,961</u>
Direct sales		2,287,742
Total transfers and sales		<u>16,246,703</u>
Net expense of developmental production		<u>7,782,484</u>
Fertilizer introduction		
Fertilizer industry demonstrations		
Fertilizers used		12,990,670
Educational distribution expense	1,058,150	
Provision for depreciation	1,686	
Administrative and general expenses; schedule F	<u>63,202</u>	
		<u>1,123,038</u>
Less industry payments for fertilizer; note b		<u>14,113,708</u>
		<u>12,451,607</u>
		<u>1,662,101</u>
Farm test demonstrations outside the Valley		
Fertilizers used		409,985
Planning and supervision	489,232	
Provision for depreciation	638	
Administrative and general expenses; schedule F	<u>19,913</u>	
		<u>509,783</u>
		<u>919,768</u>
Less farmer payments for fertilizer		<u>302,795</u>
		<u>616,973</u>
Net expense of fertilizer introduction		<u>2,279,074</u>
Research and development		
Research and development of products and processes		
Applied research		822,569
Process engineering		1,063,655
General expenses		<u>623,380</u>
		<u>2,509,604</u>
*Deduct		

SCHEDULE D

Page 3

TENNESSEE VALLEY AUTHORITY DETAILS OF NONPOWER NET EXPENSE FOR THE YEAR ENDED JUNE 30, 1969

FERTILIZER AND MUNITIONS DEVELOPMENT - continued

Research and development - continued	
Research and development of processes for recovery of sulfur	\$ 154,527
Basic chemical and agronomic research	1,518,729
Provision for depreciation	98,311
Administrative and general expenses; schedule F	<u>187,007</u>
Total expense of research and development	<u>4,468,178</u>
Net expense of fertilizer and munitions development	<u>\$14,529,736</u>

GENERAL RESOURCES DEVELOPMENT

Agricultural projects	
Fertilizers used	
In specific tributary areas	\$134,623
Outside specific tributary areas	<u>373,985</u>
Planning and supervision	
In specific tributary areas	382,131
Outside specific tributary areas	<u>586,725</u>
	<u>968,856</u>
Less farmer payments for fertilizer	
In specific tributary areas	61,525
Outside specific tributary areas	<u>231,815</u>
	<u>293,340</u>
	<u>1,184,124</u>
Agribusiness development	62,481
Preliminary investigations in tributary watersheds	40,613
Program planning and analysis	53,702
Research on forage fertilization and utilization	49,609
Alleviation of rural poverty	25,055
Tenure and land use adjustment	9,981
Tennessee Valley rural life conferences	9,831
Provision for depreciation	3,734
Administrative and general expenses; schedule F	<u>49,349</u>
Net expense of agricultural projects	<u>304,355</u>
	<u>1,488,479</u>
Forestry projects	
Use of Valley forests	435,474
Development of Valley forests	466,117
Investigation of forest influences	32,322
Provision for depreciation	10,116
Administrative and general expenses; schedule F	<u>43,284</u>
Total expense of forestry projects	<u>987,313</u>
Tributary area development	
Basic investigations	35,982
Development assistance in specific tributary areas	925,219
Development assistance outside specific tributary areas	32,943
Provision for depreciation	195
Beech River water control system operation expenses; schedule E	120,677
Administrative and general expenses; schedule F	<u>59,731</u>
Total expense of tributary area development	<u>1,174,747</u>
Regional development planning	
Regional development planning	288,249
Administrative and general expenses; schedule F	<u>10,388</u>
Total expense of regional development planning	<u>298,637</u>
Demonstrations in education and manpower development	
Demonstrations in education and manpower development	39,207
Administrative and general expenses; schedule F	<u>866</u>
Total expense of demonstrations in education and manpower development	<u>40,073</u>

TENNESSEE VALLEY AUTHORITY
DETAILS OF NONPOWER NET EXPENSE
FOR THE YEAR ENDED JUNE 30, 1969

GENERAL RESOURCES DEVELOPMENT - continued

Minerals projects	
Mineral resources investigations	\$ 156,692
Administrative and general expenses; schedule F	<u>5,194</u>
Total expense of minerals projects	<u>161,886</u>
Environmental quality projects	
Reservoir shoreline cleanup	77,628
Strip mine reclamation	68,556
Research on disposal of solid wastes	11,428
Administrative and general expenses; schedule F	<u>9,523</u>
Total expense of environmental quality projects	<u>167,135</u>
Net expense of general resources development	<u>\$ 4,318,270</u>

LAND BETWEEN THE LAKES OPERATIONS

Land between the lakes operations	\$ 1,005,559
Provision for depreciation	246,325
Administrative and general expenses; schedule F	<u>19,911</u>
Total expense of land between the lakes operations	<u>\$ 1,271,795</u>

TOPOGRAPHIC MAPPING

Topographic mapping	\$ 356,702
Provision for depreciation	5,384
Administrative and general expenses; schedule F	<u>11,380</u>
Total expense of topographic mapping	<u>\$ 373,466</u>

OTHER EXPENSE OR INCOME*

Emergency preparedness	\$ 14,400
Maintenance of bridges financed by others on TVA dams	31,446
Interest income from receivables	<u>23,587*</u>
Other expense, net	<u>\$ 22,259</u>
Net expense	<u>\$33,626,507</u>

Notes:

- a. In the discharge of its obligations under Section 5 of the TVA Act, TVA operates plants for the manufacture of products for agricultural and military purposes; conducts research and pilot plant development of new or improved processes for the production of new or existing fertilizers and munitions; and tests the fertilizers produced and demonstrates their effectiveness. Production is carried out on an experimental basis, and costs are consequently affected by the developmental nature of the manufacturing operations.

Research on products and processes is not scaled to TVA's production operations. Its scope is determined by opportunities to render service in the public interest; findings are made available to the public through technical publications, answers to correspondence, and discussions with technical visitors to the laboratories and plants. For these reasons, the cost of such research is accounted for under a separate program rather than as a part of production operations.

- b. Sales of fertilizer materials are not on a commercial basis, but are made to organizations collaborating in an educational program aimed at improving the manufacture, distribution, and use of fertilizers.

SCHEDULE E

TENNESSEE VALLEY AUTHORITY OPERATING EXPENSES OF MULTIPLE-USE FACILITIES FOR THE YEAR ENDED JUNE 30, 1969

	<u>Total</u>	<u>Distributed to</u>			
		<u>Power operations</u>	<u>Navigation operations</u>	<u>Flood control operations</u>	<u>Tributary area development</u>
Common to power, navigation, and flood control					
Operation					
Water dispatching	\$ 1,044,866				
Water control investigations	140,091				
Investigations and control of reservoir ecology	1,510,468				
Plant protection and services to visitors	1,201,395				
Operation and upkeep of dam reservations	780,221				
Reservoir land management	990,575				
Other operating expense	13,662				
Total operation	5,681,278	\$2,272,511	\$1,704,383	\$1,704,384	\$ -
Administrative and general expenses; schedule F	281,546	112,618	84,464	84,464	-
Maintenance	966,792	402,083	271,911	292,798	-
Provision for depreciation	3,012,779	1,218,763	924,343	869,673	-
Total common to power, navigation, and flood control	9,942,395	4,005,975	2,985,101	2,951,319	-
Other projects					
Beech River water control system.					
Operation	141,661	-	-	70,831	70,830
Maintenance	18,242	-	-	4,561	13,681
Provision for depreciation	34,915	-	-	8,728	26,187
Total	194,818	-	-	84,120	110,698
Bear Creek water control system					
Operation	12,919	-	-	6,459	6,460
Administrative and general expenses; schedule F	7,038	-	-	3,519	3,519
Total other projects	214,775	-	-	94,098	120,677
Total	\$10,157,170	\$4,005,975	\$2,985,101	\$3,045,417	\$120,677
Total expenses					
Operation	\$ 5,835,858	\$2,272,511	\$1,704,383	\$1,781,674	\$ 77,290
Administrative and general	288,584	112,618	84,464	87,983	3,519
Maintenance	985,034	402,083	271,911	297,359	13,681
Depreciation	3,047,694	1,218,763	924,343	878,401	26,187
Total	\$10,157,170	\$4,005,975	\$2,985,101	\$3,045,417	\$120,677

SCHEDULE F

TENNESSEE VALLEY AUTHORITY
ADMINISTRATIVE AND GENERAL EXPENSES
FOR THE YEAR ENDED JUNE 30, 1969

Expenses

Board of directors	\$ 190,127
Office of the general manager	243,510
Budget staff	262,226
Washington office	70,528
Information office, including technical library service	662,538
Division of personnel	1,883,451
Division of finance	2,620,568
Division of law	657,023
Division of property and supply	1,256,478
Medical and safety services	889,624
Other administrative and general	<u>75,213</u>
Total	<u>\$8,811,286</u>

	<u>Amount</u>	<u>Percent of total</u>
Distribution		
Construction	\$3,856,975	43.77
Recovered through services billed to others at cost	142,624	1.62
Expense of programs		
Power	3,377,854	38.34
Water resources development		
Navigation	70,985	.80
Flood control	31,165	.35
Regional water quality management	43,284	.49
Fish and wildlife development	12,985	.15
Recreation projects	33,761	.38
Surveys and general studies for river development	30,911	.35
Multiple-use operations		
Common to power, navigation, and flood control	281,546	3.19
Other projects	7,038	.08
Fertilizer and munitions development		
Developmental production	442,410	5.02
Fertilizer industry demonstrations	63,202	.72
Farm test demonstrations	19,913	.23
Research and development	187,007	2.12
General resources development		
Agricultural projects	49,349	.56
Forestry projects	43,284	.49
Tributary area development	59,731	.68
Regional development planning	10,388	.12
Demonstrations in education and manpower development	866	.01
Minerals projects	5,194	.06
Environmental quality projects	9,523	.11
Land between the lakes operations	19,911	.23
Topographic mapping	<u>11,380</u>	<u>.13</u>
Total	<u>\$8,811,286</u>	<u>100.00</u>

RETIREMENT SYSTEM OF THE TENNESSEE VALLEY AUTHORITY

The TVA retirement system was established in 1939 to provide a program of retirement, disability, and death benefits financed jointly by contributions of TVA and of its salaried employees. Administration of the system is vested in its own Board of Directors, and its funds are held and invested by a trustee. Three of the seven members of the Board of Directors are appointed by TVA, three are elected by the participants, and the seventh member is chosen by these six directors.

The operation of the retirement system is regarded as a Federal function in general and as a TVA function in particular. As authorized in section 301(b) of the Government Corporation Control Act (31 U.S.C. 866(b)), the General Accounting Office contracted for a firm of certified public accountants to make the audit of the system. Following are the balance sheet of the system at June 30, 1969, and the related statements of change in fund balances for the year then ended with respect to the Fixed Benefit, the Variable Annuity, and the Voluntary Retirement Savings and Investment Plan funds, together with the auditors' opinion.

LYBRAND, ROSS BROS. & MONTGOMERY

CERTIFIED PUBLIC ACCOUNTANTS

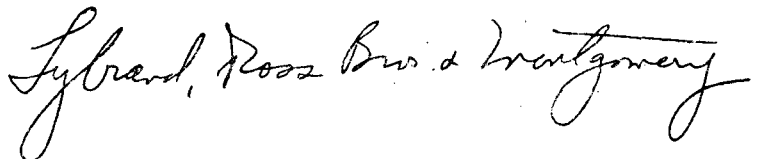
COOPERS & LYBRAND

IN AREAS OF THE WORLD
OUTSIDE THE UNITED STATES

To the Comptroller General of the United States,
Washington, D. C.:

We have examined the balance sheet of the RETIREMENT SYSTEM of the TENNESSEE VALLEY AUTHORITY as of June 30, 1969 and the related statement of changes in fund balances for the year then ended. Our examination was made in accordance with generally accepted auditing standards, and accordingly included confirmations from the trustee and custodian of cash and investments held as of June 30, 1969 and such tests of the accounting records and such other auditing procedures as we considered necessary in the circumstances.

In our opinion, the aforementioned financial statements present fairly the financial position of the Retirement System of the Tennessee Valley Authority at June 30, 1969, and the changes in fund balances for the year then ended, in conformity with generally accepted accounting principles applied on a basis consistent with that of the preceding year.



New York, October 7, 1969.

RETIREMENT SYSTEM of the TENNESSEE VALLEY AUTHORITY
BALANCE SHEET, June 30, 1969

ASSETS:

Investments:

Securities:

Bonds and notes (details annexed):

At amortized cost (current redemption values or market quotations, \$78,378,125)

At market (cost, \$3,768,963)

Real estate mortgages (details annexed)

Preferred stocks (details annexed):

At cost (market quotations, \$4,237,875)

At market (cost, \$708,885)

Common stocks (details annexed):

At cost (market quotations, \$138,847,612)

At market (cost, \$35,719,885)

Fund shares:

103,684 shares, at market, \$26.13 per share (cost, \$3,085,944)

37,430 shares, at market, \$10.85 per share (cost, \$427,288)

Properties acquired under buy and leaseback agreements, at cost,
less amortization of \$473,738

Real property:

Land, at cost

Buildings, at cost, less allowance for depreciation of \$142,958

Cash:

Treasurer's fund

Trustee

Receivables:

Contributions

Dividends, accrued interest, rents, etc.

Securities sold

LIABILITIES and FUNDS:

Payables:

Securities purchased

Other

Fund balances (statement annexed)

<u>Fixed Benefit Fund</u>	<u>Variable Annuity Fund</u>	<u>Voluntary Retirement Savings and Investment Plan</u>	
		<u>Fidelity Trend Fund</u>	<u>Puritan Fund</u>
\$ 97,440,178	\$ 3,668,449		
8,109,746			
5,460,895	715,400		
95,587,061	35,711,216		
<u>206,597,880</u>	<u>40,095,065</u>		
		\$2,709,251	\$406,119
<u>206,597,880</u>	<u>40,095,065</u>	<u>2,709,251</u>	<u>406,119</u>
2,060,393			
627,000			
<u>926,792</u>			
210,212,065	40,095,065	2,709,251	406,119
19,676	14,105	74	
638,085	724,270		
1,015,354	172,096		
1,278,487	120,723		
	<u>89,369</u>		
<u>\$213,163,667</u>	<u>\$41,215,628</u>	<u>\$2,709,325</u>	<u>\$406,119</u>
\$ 137,392	\$ 339,820	\$ 149	\$ 52
150,976			
<u>212,875,299</u>	<u>40,875,808</u>	<u>2,709,176</u>	<u>406,067</u>
<u>\$213,163,667</u>	<u>\$41,215,628</u>	<u>\$2,709,325</u>	<u>\$406,119</u>

RETIREMENT SYSTEM of the TENNESSEE VALLEY AUTHORITY

INVESTMENTS in SECURITIES

June 30, 1969

FIXED BENEFIT FUND (at cost or
amortized cost):

Bonds and notes:

Principal amount:

Utility	\$24,645,000
Industrial	27,986,910
Financial	13,915,954
Foreign	12,226,000
Railroad	3,686,548

Unamortized (discounts) and
premiums, net(1,725,833)

80,734,579

U. S. Treasury Bills

12,576,599

Commercial paper

4,129,000

\$ 97,440,178

Real estate mortgages:

Veterans Administration	2,263,998
Federal Housing Administration	1,604,526
Commingled	3,709,796
Other	<u>531,426</u>

8,109,746

Preferred stocks:

Industrial

5,460,895

Common stocks:

Industrial	71,651,728
Utility	16,145,475
Commingled	5,800,000
Other	<u>1,989,858</u>

95,587,061\$206,597,880

VARIABLE ANNUITY FUND (at market):

Bonds and notes:

Industrial	2,195,259
Financial	<u>1,473,190</u>

\$ 3,668,449

Preferred stocks:

Industrial

715,400

Common stocks:

Industrial	31,131,216
Insurance	2,420,000
Utility	<u>2,160,000</u>

35,711,216\$ 40,095,065

RETIREMENT SYSTEM of the TENNESSEE VALLEY AUTHORITY
STATEMENT of CHANGES in FUND BALANCES
for the year ended June 30, 1969

	<u>Fixed Benefit Fund</u>	
	<u>Total</u>	<u>Annuity Savings Account</u>
Contributions:		
Members	\$ 3,007,385	\$ 3,007,385
Tennessee Valley Authority	10,600,089	
Investment income:		
Interest	5,025,931	
Dividends	2,942,407	
Rents (less depreciation and amortization of \$89,844)	191,220	
Net realized gains (losses) on sales of investments	1,454,183	
Capital gains distribution		
Net unrealized appreciation (depreciation) of investments		
	<u>23,221,215</u>	<u>3,007,385</u>
Transfers:		
Interest	8,108	1,643,047
Accumulations	<u>(1,511,973)</u>	<u>(4,466,260)</u>
	<u>\$ 21,717,350</u>	<u>\$ 184,172</u>
Administrative expenses	\$ 493,143	
Withdrawals	492,719	\$ 448,386
Death benefits	825,192	154,444
Retirement benefits	<u>5,074,559</u>	
	<u>\$ 6,885,613</u>	<u>\$ 602,830</u>
Net increase (decrease)	\$ 14,831,737	(\$ 418,658)
Balances, June 30, 1968	<u>198,043,562</u>	<u>42,815,571</u>
Balances, June 30, 1969	<u>\$212,875,299</u>	<u>\$42,396,913</u>

<u>Fixed Benefit Fund</u>		<u>Variable Annuity Fund</u>	<u>Voluntary Retirement Savings and Investment Plan</u>	
<u>Pension Accumulation Account</u>	<u>Investment Reserve Account</u>		<u>Fidelity Trend Fund</u>	<u>Puritan Fund</u>
		\$ 3,735,720	\$1,243,540	\$190,529
\$ 10,600,089				
5,025,931		363,080		
2,942,407		659,202	43,168	11,728
191,220				
2,623,325	(\$1,169,142)	4,829,992		
			158,939	11,103
		(9,983,012)	(422,536)	(40,597)
21,382,972	(1,169,142)	(395,018)	1,023,111	172,763
(2,001,769)	366,830	(8,108)		
2,954,287		1,511,973	(2,077)	2,077
<u>\$ 22,335,490</u>	<u>(\$ 802,312)</u>	<u>\$ 1,108,847</u>	<u>\$1,021,034</u>	<u>\$174,840</u>
\$ 493,143				
44,333		\$ 416,931	\$ 94,661	\$ 15,324
670,748				
5,074,559		250,763		
<u>\$ 6,282,783</u>		<u>\$ 667,694</u>	<u>\$ 94,661</u>	<u>\$ 15,324</u>
\$ 16,052,707	(\$ 802,312)	\$ 441,153	\$ 926,373	\$159,516
145,545,577	9,682,414	40,434,655	1,782,803	246,551
<u>\$161,598,284</u>	<u>\$8,880,102</u>	<u>\$40,875,808</u>	<u>\$2,709,176</u>	<u>\$406,067</u>